

## Lopez, Vivian

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**From:** Claire Trombadore  
**Sent:** Monday, September 28, 1998 11:49 AM  
**To:** memcclelland@efawest.navy.mil; rpowell@efawest.navy.mil;  
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**Cc:** Sicklej@TTEMI.com; hw1.vheusink@hw1.cahwnet.gov; dfl@rb2.swrcb.ca.gov;  
amy\_brownell@dph.sf.ca.us  
**Subject:** Cesium 137 Spill at HPS  
**Flag Status:** Flagged

We discussed the comments we provided internally again and they are still valid. We have not changed our opinion as to what must be done regarding this site. Thank you for providing us with a copy of the report on the cleanup. We are reviewing it now and will provide comments on or about Oct. 15. The cleanup of this spill should have been handled like any other CERCLA removal.

The Navy should have provided an ECCA and Action Memo and finally a closeout report. We will review the report you provided as if it were a closeout report.

----- Forwarded by Claire Trombadore/R9/USEPA/US on 09/28/98

11:36 AM -----

Claire Trombadore

08/21/98 05:31 PM

To: memcclelland@efawest.navy.mil, rpowell@efawest.navy.mil, waradzevich@efawest.navy.mil

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Subject: Cesium 137 Spill at HPS

Hi everyone. I have been speaking with Steve Dean about the Cesium spill cleanup on Parcel D and am attaching some information from him for your review. I think we need to talk about this and about Parcel D in general ASAP. Could we set aside the afternoon of September 10, following the BCT/RPM? let me know.

----- Forwarded by Steve Dean/R9/USEPA/US on 08/14/98 10:56 AM

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To: Claire Trombadore/R9/USEPA/US@EPA, Sheryl Lauth/R9/USEPA/US@EPA

cc:

Subject: Cesium 137 Spill at HPS

I called Lino Fraguso at RASO to get more details on the Cs137 Peanut Spill at Hunters Point.

He thinks that since the concrete impacted by the spill was removed all the way down to the soil underneath the Cs137 in the soil one foot away from the edge of spill area must be from atmospheric fallout from the 1950's and 60's that was encapsulated by the concrete cover. Cmdr Lino Fraguso's explanation is possible: The elevated Cs137 (>1pCi/g) in the soil under the concrete is fallout that got encapsulated when concrete was poured over it. However, the background data for Cs137 reported in 1992 in the Navy's Surface Confirmation Radiation Survey for HPNS does not agree with the data from the reference soil samples taken near the actual spill. The range of values reported (on page 56) for eight Cs137 background soil samples was <0.073 to 0.38 pCi/g. The four reference samples range from 0.152 to 1.17 pCi/g.

However, another possibility is that since cesium is soluble and mobile (like sodium) the original spilled solution migrated over time down through micro cracks in the concrete and then laterally out through the soil under the concrete away from the spill. When New World Technology, a competent radiation contractor, bored holes through the concrete to take background reference samples they drilled too close to the impacted area (Lino mentioned one foot from the edge of the spill area). Thus, the background samples were contaminated with cesium from the spill area.

The Navy needs to provide better reference site data from soil samples taken from under the parking lot concrete that is definitely not impacted by the spill. This is consistent with the recommendations for a radioactive contaminant present in background made by the Multi-Agency Radiation Survey and Site Investigation Manual (NUREG-1575/ EPA 402-R-97-016) also known as the MARSSIM (Dec 97).

If the new data cannot confirm the last soil reference data range of Cs137 concentrations; then, the Navy is obliged to remove more soil from under the concrete around the periphery of the spill area.

I hope this helps clarify situation regarding the cesium-137 peanut spill at HPNS.

Steve M. Dean